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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,686	06/06/2006	Marc Plissonnier	291620US0PCT	7260
22850	7590	09/19/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			MATZEK, MATTHEW D	
			ART UNIT	PAPER NUMBER
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			09/19/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/581,686	<b>Applicant(s)</b> PLISSONNIER ET AL.	
	<b>Examiner</b> MATTHEW D. MATZEK	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/06</u> .                                                    | 6) <input type="checkbox"/> Other: _____                          |

***Election/Restrictions***

1. Applicant's election with traverse of Group 1, claims 1-3 in the reply filed on 7/23/2008 is acknowledged. The traversal is on the ground(s) that restriction is only proper if the claims of the restricted groups are independent or patentably distinct and there would be a serious burden placed upon the Examiner is not valid as this application is a national stage application and restriction is required under 35 U.S.C. 121 and 372. Applicant continues by arguing that Examiner has the burden of explaining why each group lacks unity with each other group specifically describing special technical features in each group. This was done by Examiner in the Restriction dated 6/23/2008. Applicant argues that Examiner has failed to provide evidence that he has interpreted the claims in light of the description in making the assertion of a lack of unity and therefore has not met his burden necessary to support such an assertion. This is not found to be persuasive because Examiner has pointed out the specific technical feature present in each of the two groups and clearly demonstrated in citing Dubrow said technical feature present in each of the two groups fails to make a contribution over the prior art. Applicant has failed to distinctly and specifically point out how said technical feature makes a contribution over the prior art, including that of Dubrow. Furthermore, Examiner has interpreted the claims in light of the description and drawings and Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The requirement is still deemed proper and is therefore made FINAL.

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2. Claims 4 and 5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/23/2008.

***Specification***

3. The abstract of the disclosure is objected to because it contains more than a single paragraph. Furthermore it mentions Fig. 2, without any description as to its relevance to the abstract. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Dubrow (US 2005/0181195 A1).

Dubrow discloses structures comprising a plurality of nanofibers [0007] from a solid substrate [0068], which Examiner has equated to the claimed “carpet”, and the surfaces of said nanofibers have been coated with superhydrophobic materials [0036]. The hydrophobic materials available to coat the nanofibers include carbofluorinated polymers (claim 24). According to Dubrow the structure possesses the coating's given property and as such requires the surface between the nanofibers to also be covered with the

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coating in order for the entire article to possess the desired property (i.e. superhydrophobicity).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Dubrow (US 2005/0181195 A1).

a. Dubrow discloses substrates comprising a plurality of nanofibers [0007], which Examiner has equated to the claimed “carpet”, and the surfaces of said nanofibers have been coated with superhydrophobic materials [0036]. The hydrophobic materials available to coat the nanofibers include carbofluorinated polymers (claim 24). The applied reference discloses that the surfaces of the nanofibers are to be covered with the superhydrophobic materials to form an article that is superhydrophobic in its entirety, and as such Examiner takes the position that this provides for the limitation “the surface between these nanofibers is covered with a layer of this same polymer”, because without the surface between the nanofibers being covered the overall article would not be superhydrophobic.

b. Dubrow discloses a number of different materials of differing compositions that may serve as nanofibers [0044, 0047, 0068]. The reference also discloses that while carbon nanotubes are not preferably used in the applied invention, “[t]he nanofibers of

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the invention...can be fabricated from essentially any convenient material or materials.”

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to use carbon nanotubes as the "nanofiber", because the manufacture of carbon nanotubes is convenient and pre-fabricated nanotubes are readily available with volumes of analytical data already available for carbon nanotubes.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW D. MATZEK whose telephone number is (571)272-2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571.272.1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/  
Patent Examiner, Art Unit 1794

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